TRANSDERMAL DRUG DELIVERY

DEVICE WITH MULTILAYER BACKING

ABSTRACT OF THE DISCLOSURE

The present invention is directed toward a transdermal device comprising a backing material that has low moisture transmission, moderate to high oxygen transmission, good resistance to component diffusion, and good flexibility. In one aspect, the invention comprises a transdermal drug delivery device comprising a reservoir and a multilayer polymeric film backing. The reservoir comprises a pharmaceutically active agent. The multilayer polymeric film backing comprises an outer shell layer, an inner shell layer, and an inner core between the outer shell layer and the inner shell layer comprised of 11 or more alternating layers of a thermoplastic elastomer and an olefinic polymer, wherein the weight ratio of thermoplastic elastomer to olefinic polymer in the core is below about 85:15 and above about 5:95. The inner shell layer is adjacent to the reservoir and interposed between the outer shell layer and the reservoir. At least one of the shell layers comprises a polymer selected from the group consisting of a homopolymer of polypropylene, a copolymer of polypropylene, a homopolymer of poly-4-methyl-1-pentene, a copolymer of poly-4-methyl-1-pentene, and a blend thereof.